

SEQUENCE LISTING

<110> JAPAN SCIENCE AND TECHNOLOGY CORPORATION

<120> Receptor proteins specifically recognizing bacterial DNA

<130> A031-29PCT

<140>

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<150> 2000-219652

<151> 2000-07-19

<160> 5

<170> PatentIn Ver. 2.1

<210> 1

<211> 3257

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (107)..(3205)

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 Met Gly Phe
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 Cys Arg Ser Ala Leu His Pro Leu Ser Leu Leu Val Gln Ala Ile Met
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ctg gcc atg acc ctg gcc ctg ggt acc ttg cct gcc ttc cta ccc tgt 211
 Leu Ala Met Thr Leu Ala Leu Gly Thr Leu Pro Ala Phe Leu Pro Cys
 20 25 30 35

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 Glu Leu Gln Pro His Gly Leu Val Asn Cys Asn Trp Leu Phe Leu Lys
 40 45 50

tct gtg ccc cac ttc tcc atg gca gca ccc cgt ggc aat gtc acc agc 307
 Ser Val Pro His Phe Ser Met Ala Ala Pro Arg Gly Asn Val Thr Ser
 55 60 65

ctt tcc ttg tcc tcc aac cgc atc cac cac ctc cat gat tct gac ttt 355
 Leu Ser Leu Ser Ser Asn Arg Ile His His Leu His Asp Ser Asp Phe
 70 75 80

gcc cac ctg ccc agc ctg cgg cat ctc aac ctc aag tgg aac tgc ccg 403
 Ala His Leu Pro Ser Leu Arg His Leu Asn Leu Lys Trp Asn Cys Pro
 85 90 95

ccg gtt ggc ctc agc ccc atg cac ttc ccc tgc cac atg acc atc gag 451
 Pro Val Gly Leu Ser Pro Met His Phe Pro Cys His Met Thr Ile Glu
 100 105 110 115

ccc agc acc ttc ttg gct gtg ccc acc ctg gaa gag cta aac ctg agc 499
 Pro Ser Thr Phe Leu Ala Val Pro Thr Leu Glu Glu Leu Asn Leu Ser
 120 125 130

tac aac aac atc atg act gtg cct gcg ctg ccc aaa tcc ctc ata tcc 547
 Tyr Asn Asn Ile Met Thr Val Pro Ala Leu Pro Lys Ser Leu Ile Ser
 135 140 145

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 Leu Ser Leu Ser His Thr Asn Ile Leu Met Leu Asp Ser Ala Ser Leu
 150 155 160

gcc ggc ctg cat gcc ctg cgc ttc cta ttc atg gac ggc aac tgt tat 643
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 Tyr Lys Asn Pro Cys Arg Gln Ala Leu Glu Val Ala Pro Gly Ala Leu
 180 185 190 195

ctt ggc ctg ggc aac ctc acc cac ctg tca ctc aag tac aac aac ctc 739
 Leu Gly Leu Gly Asn Leu Thr His Leu Ser Leu Lys Tyr Asn Asn Leu
 200 205 210

act gtg gtg ccc cgc aac ctg cct tcc agc ctg gag tat ctg ctg ttg 787
 Thr Val Val Pro Arg Asn Leu Pro Ser Ser Leu Glu Tyr Leu Leu Leu
 215 220 225

tcc tac aac cgc atc gtc aaa ctg gcg cct gag gac ctg gcc aat ctg 835
 Ser Tyr Asn Arg Ile Val Lys Leu Ala Pro Glu Asp Leu Ala Asn Leu

230	235	240	
acc gcc ctg cgt gtg ctc gat gtg ggc gga aat tgc cgc cgc tgc gac			883
Thr Ala Leu Arg Val Leu Asp Val Gly Gly Asn Cys Arg Arg Cys Asp			
245	250	255	
cac gct ccc aac ccc tgc atg gag tgc cct cgt cac ttc ccc cag cta			931
His Ala Pro Asn Pro Cys Met Glu Cys Pro Arg His Phe Pro Gln Leu			
260	265	270	275
cat ccc gat acc ttc agc cac ctg agc cgt ctt gaa ggc ctg gtg ttg			979
His Pro Asp Thr Phe Ser His Leu Ser Arg Leu Glu Gly Leu Val Leu			
	280	285	290
aag gac agt tct ctc tcc tgg ctg aal gcc agt tgg ttc cgt ggg ctg			1027
Lys Asp Ser Ser Leu Ser Trp Leu Asn Ala Ser Trp Phe Arg Gly Leu			
	295	300	305
gga aac ctc cga gtg ctg gac ctg agt gag aac ttc ctc tac aaa tgc			1075
Gly Asn Leu Arg Val Leu Asp Leu Ser Glu Asn Phe Leu Tyr Lys Cys			
	310	315	320
atc act aaa acc aag gcc ttc cag ggc cta aca cag ctg cgc aag ctt			1123
Ile Thr Lys Thr Lys Ala Phe Gln Gly Leu Thr Gln Leu Arg Lys Leu			
	325	330	335
aac ctg tcc ttc aat tac caa aag agg gtg tcc ttt gcc cac ctg tct			1171
Asn Leu Ser Phe Asn Tyr Gln Lys Arg Val Ser Phe Ala His Leu Ser			
340	345	350	355
ctg gcc cct tcc ttc ggg agc ctg gtc gcc ctg aag gag ctg gac atg			1219
Leu Ala Pro Ser Phe Gly Ser Leu Val Ala Leu Lys Glu Leu Asp Met			
	360	365	370
cac ggc atc ttc ttc cgc tca ctc gat gag acc acg ctc cgg cca ctg			1267
His Gly Ile Phe Phe Arg Ser Leu Asp Glu Thr Thr Leu Arg Pro Leu			
	375	380	385
gcc cgc ctg ccc atg ctc cag act ctg cgt ctg cag atg aac ttc atc			1315
Ala Arg Leu Pro Met Leu Gln Thr Leu Arg Leu Gln Met Asn Phe Ile			
	390	395	400
aac cag gcc cag ctc ggc atc ttc agg gcc ttc cct ggc ctg cgc tac			1363
Asn Gln Ala Gln Leu Gly Ile Phe Arg Ala Phe Pro Gly Leu Arg Tyr			
405	410	415	

glt gac ctg tct gac aac cgc atc agc gga gct tct gag ctg aca gcc 1411
Val Asp Leu Ser Asp Asn Arg Ile Ser Gly Ala Ser Glu Leu Thr Ala
420 425 430 435

acc atg ggg gag gca gat gga ggg gag aag gtc tgg ctg cag cct ggg 1459
Thr Met Gly Glu Ala Asp Gly Gly Glu Lys Val Trp Leu Gln Pro Gly
440 445 450

gac ctt gct ccg gcc cca glg gac acf ccc agc tct gaa gac ttc agg 1507
Asp Leu Ala Pro Ala Pro Val Asp Thr Pro Ser Ser Glu Asp Phe Arg
455 460 465

ccc aac tgc agc acc ctc aac ttc acc ttg gal ctg tca cgg aac aac 1555
Pro Asn Cys Ser Thr Leu Asn Phe Thr Leu Asp Leu Ser Arg Asn Asn
470 475 480

ctg gtg acc gtg cag ccg gag atg tll gcc cag ctc tcg cac ctg cag 1603
 Leu Val Thr Val Gln Pro Glu Met Phe Ala Gln Leu Ser His Leu Gln
 485 490 495

tgc ctg cgc ctg agc cac aac tgc atc tgc cag gca gtc aat ggc tcc 1651
Cys Leu Arg Leu Ser His Asn Cys Ile Ser Gln Ala Val Asn Gly Ser
500 505 510 515

cag ttc ctg ccg ctg acc ggt ctg cag gtc cta gac ctg tcc cac aat 1699
Gln Phe Leu Pro Leu Thr Gly Leu Gln Val Leu Asp Leu Ser His Asn
520 525 530

aag ctg gac ctc tac cac gag cac tca ttc acg gag cta cca cga ctg 1747
Lys Leu Asp Leu Tyr His Glu His Ser Phe Thr Glu Leu Pro Arg Leu
535 540 545

gag gcc ctg gac ctc agc tac aac agc cag ccc ttt ggc atg cag ggc 1795
Glu Ala Leu Asp Leu Ser Tyr Asn Ser Gln Pro Phe Gly Met Gln Gly
550 555 560

gtg ggc cac aac ttc agc ttc gtg gct cac ctg cgc acc ctg cgc cac 1843
Val Gly His Asn Phe Ser Phe Val Ala His Leu Arg Thr Leu Arg His
565 570 575

ctc agc ctg gcc cac aac aac atc cac agc caa gtg tcc cag cag etc 1891
Leu Ser Leu Ala His Asn Asn Ile His Ser Gln Val Ser Gln Gln Leu
580 585 590 595

tgc agt acg tgc ctg cgg gcc ctg gac ttc agc ggc aat gca ctg ggc 1939
 Cys Ser Thr Ser Leu Arg Ala Leu Asp Phe Ser Gly Asn Ala Leu Gly

600	605	610	
cat atg tgg gcc gag gga gac ctc tat ctg cac ttc ttc caa ggc ctg			1987
His Met Trp Ala Glu Gly Asp Leu Tyr Leu His Phe Phe Gln Gly Leu			
615	620	625	
agc ggt ttg atc tgg ctg gac ttg tcc cag aac cgc ctg cac acc ctc			2035
Ser Gly Leu Ile Trp Leu Asp Leu Ser Gln Asn Arg Leu His Thr Leu			
630	635	640	
ctg ccc caa acc ctg cgc aac ctc ccc aag agc cta cag gtg ctg cgt			2083
Leu Pro Gln Thr Leu Arg Asn Leu Pro Lys Ser Leu Gln Val Leu Arg			
645	650	655	
ctc cgt gac aat tac ctg gcc ttc ttt aag tgg tgg agc ctc cac ttc			2131
Leu Arg Asp Asn Tyr Leu Ala Phe Phe Lys Trp Trp Ser Leu His Phe			
660	665	670	675
ctg ccc aaa ctg gaa gtc ctc gac ctg gca gga aac cag ctg aag gcc			2179
Leu Pro Lys Leu Glu Val Leu Asp Leu Ala Gly Asn Gln Leu Lys Ala			
680	685	690	
ctg acc aat ggc agc ctg cct gct gcc acc cgg ctc cgg agg ctg gat			2227
Leu Thr Asn Gly Ser Leu Pro Ala Gly Thr Arg Leu Arg Arg Leu Asp			
695	700	705	
gtc agc tgc aac agc atc agc ttc gtg gcc ccc ggc ttc ttt tcc aag			2275
Val Ser Cys Asn Ser Ile Ser Phe Val Ala Pro Gly Phe Phe Ser Lys			
710	715	720	
gcc aag gag ctg cga gag ctc aac ctt agc gcc aac gcc ctc aag aca			2323
Ala Lys Glu Leu Arg Glu Leu Asn Leu Ser Ala Asn Ala Leu Lys Thr			
725	730	735	
gtg gac cac tcc tgg ttt ggg ccc ctg gcg agt gcc ctg caa ata cta			2371
Val Asp His Ser Trp Phe Gly Pro Leu Ala Ser Ala Leu Gln Ile Leu			
740	745	750	755
gat gta agc gcc aac cct ctg cac tgc gcc tgt ggg gcg gcc ttt atg			2419
Asp Val Ser Ala Asn Pro Leu His Cys Ala Cys Gly Ala Ala Phe Met			
760	765	770	
gac ttc ctg ctg gag gtg cag gct gcc gtg ccc ggt ctg ccc agc cgg			2467
Asp Phe Leu Leu Glu Val Gln Ala Ala Val Pro Gly Leu Pro Ser Arg			
775	780	785	

gtg aag tgt ggc agt ccg ggc cag ctc cag ggc ctc agc atc ttt gca 2515
Val Lys Cys Gly Ser Pro Gly Gln Leu Gln Gly Leu Ser Ile Phe Ala
790 795 800

cag gac ctg cgc ctc tgc ctg gat gag gcc ctc tcc tgg gac tgt ttc 2563
Gln Asp Leu Arg Leu Cys Leu Asp Glu Ala Leu Ser Trp Asp Cys Phe
805 810 815

gcc ctc tgc ctg ctg gct gtg gct ctg ggc ctg ggt gtg ccc atg ctg 2611
Ala Leu Ser Leu Leu Ala Val Ala Leu Gly Leu Gly Val Pro Met Leu
820 825 830 835

cat cac ctc tgt ggc tgg gac ctc tgg tac tgc ttc cac ctg tgc ctg 2659
His His Leu Cys Gly Trp Asp Leu Trp Tyr Cys Phe His Leu Cys Leu
840 845 850

gcc tgg ctt ccc tgg cgg ggg cgg caa agt ggg cga gat gag gat gcc 2707
Ala Trp Leu Pro Trp Arg Gly Arg Gln Ser Gly Arg Asp Glu Asp Ala
855 860 865

ctg ccc tac gat gcc ttc gtg gtc ttc gac aaa acg cag agc gca gtg 2755
Leu Pro Tyr Asp Ala Phe Val Val Phe Asp Lys Thr Gln Ser Ala Val
870 875 880

gca gac tgg gtg tac aac gag ctt cgg ggg cag ctg gag gag tgc cgt 2803
Ala Asp Trp Val Tyr Asn Glu Leu Arg Gly Gln Leu Glu Glu Cys Arg
885 890 895

ggg cgc tgg gca ctc cgc ctg tgc ctg gag gaa cgc gac tgg ctg cct 2851
Gly Arg Trp Ala Leu Arg Leu Cys Leu Glu Glu Arg Asp Trp Leu Pro
900 905 910 915

ggc aaa acc ctc ttt gag aac ctg tgg gcc tgc gtc tat ggc agc cgc 2899
Gly Lys Thr Leu Phe Glu Asn Leu Trp Ala Ser Val Tyr Gly Ser Arg
920 925 930

aag acg ctg ttt gtg ctg gcc cac acg gac cgg gtc agt ggt ctc ttg 2947
Lys Thr Leu Phe Val Leu Ala His Thr Asp Arg Val Ser Gly Leu Leu
935 940 945

cgc gcc agc ttc ctg ctg gcc cag cag cgc ctg ctg gag gac cgc aag 2995
Arg Ala Ser Phe Leu Leu Ala Gln Gln Arg Leu Leu Glu Asp Arg Lys
950 955 960

gac gtc gtg gtg ctg gtg atc ctg agc cct gac ggc cgc cgc tcc cgc 3043
Asp Val Val Val Leu Val Ile Leu Ser Pro Asp Gly Arg Arg Ser Arg

515	520	525
Ser His Asn Lys Leu Asp	Leu Tyr His Glu His	Ser Phe Thr Glu Leu
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Pro Arg Leu Glu Ala Leu	Asp Leu Ser Tyr Asn	Ser Gln Pro Phe Gly
545	550	555
Met Gln Gly Val Gly His	Asn Phe Ser Phe Val	Ala His Leu Arg Thr
565	570	575
Leu Arg His Leu Ser Leu	Ala His Asn Asn Ile	His Ser Gln Val Ser
580	585	590
Gln Gln Leu Cys Ser Thr	Ser Leu Arg Ala Leu	Asp Phe Ser Gly Asn
595	600	605
Ala Leu Gly His Met Trp	Ala Glu Gly Asp Leu	Tyr Leu His Phe Phe
610	615	620
Gln Gly Leu Ser Gly Leu	Ile Trp Leu Asp Leu	Ser Gln Asn Arg Leu
625	630	635
His Thr Leu Leu Pro Gln	Thr Leu Arg Asn Leu	Pro Lys Ser Leu Gln
645	650	655
Val Leu Arg Leu Arg Asp	Asn Tyr Leu Ala Phe	Phe Lys Trp Trp Ser
660	665	670
Leu His Phe Leu Pro Lys	Leu Glu Val Leu Asp	Leu Ala Gly Asn Gln
675	680	685
Leu Lys Ala Leu Thr Asn	Gly Ser Leu Pro Ala	Gly Thr Arg Leu Arg
690	695	700
Arg Leu Asp Val Ser Cys	Asn Ser Ile Ser Phe	Val Ala Pro Gly Phe
705	710	715
Phe Ser Lys Ala Lys Glu	Leu Arg Glu Leu Asn	Leu Ser Ala Asn Ala
725	730	735
Leu Lys Thr Val Asp His	Ser Trp Phe Gly Pro	Leu Ala Ser Ala Leu
740	745	750
Gln Ile Leu Asp Val Ser	Ala Asn Pro Leu His	Cys Ala Cys Gly Ala
755	760	765
Ala Phe Met Asp Phe Leu	Leu Glu Val Gln Ala	Ala Val Pro Gly Leu
770	775	780
Pro Ser Arg Val Lys Cys	Gly Ser Pro Gly Gln	Leu Gln Gly Leu Ser
785	790	795
Ile Phe Ala Gln Asp Leu	Arg Leu Cys Leu Asp	Glu Ala Leu Ser Trp
805	810	815
Asp Cys Phe Ala Leu Ser	Leu Leu Ala Val Ala	Leu Gly Leu Gly Val
820	825	830
Pro Met Leu His His Leu	Cys Gly Trp Asp Leu	Trp Tyr Cys Phe His
835	840	845
Leu Cys Leu Ala Trp Leu	Pro Trp Arg Gly Arg	Gln Ser Gly Arg Asp
850	855	860
Glu Asp Ala Leu Pro Tyr	Asp Ala Phe Val Val	Phe Asp Lys Thr Gln
865	870	875
Ser Ala Val Ala Asp Trp	Val Tyr Asn Glu Leu	Arg Gly Gln Leu Glu

gag ctg aag cct cat ggc ctg gtg gac tgc aat tgg ctg ttc ctg aag 259
 Glu Leu Lys Pro His Gly Leu Val Asp Cys Asn Trp Leu Phe Leu Lys
 40 45 50

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 Ser Val Pro Arg Phe Ser Ala Ala Ala Ser Cys Ser Asn Ile Thr Arg
 55 60 65

ctc tcc ttg atc tcc aac cgt atc cac cac ctg cac aac tcc gac ttc 355
 Leu Ser Leu Ile Ser Asn Arg Ile His His Leu His Asn Ser Asp Phe
 70 75 80

glc cac ctg tcc aac ctg cgg cag ctg aac ctc aag tgg aac tgt cca 403
 Val His Leu Ser Asn Leu Arg Gln Leu Asn Leu Lys Trp Asn Cys Pro
 85 90 95

ccc act ggc ctt agc ccc ttg cac ttc tct tgc cac atg acc att gag 451
 Pro Thr Gly Leu Ser Pro Leu His Phe Ser Cys His Met Thr Ile Glu
 100 105 110 115

ccc aga acc ttc ctg gct atg cgt aca ctg gag gag ctg aac ctg agc 499
 Pro Arg Thr Phe Leu Ala Met Arg Thr Leu Glu Glu Leu Asn Leu Ser
 120 125 130

tat aat ggt atc acc act gtg ccc cga ctg ccc agc tcc ctg gtg aat 547
 Tyr Asn Gly Ile Thr Thr Val Pro Arg Leu Pro Ser Ser Leu Val Asn
 135 140 145

ctg agc ctg agc cac acc aac atc ctg gtt cta gat gct aac agc ctc 595
 Leu Ser Leu Ser His Thr Asn Ile Leu Val Leu Asp Ala Asn Ser Leu
 150 155 160

gcc ggc cta tac agc ctg cgc gtt ctc ttc atg gac ggg aac tgc tac 643
 Ala Gly Leu Tyr Ser Leu Arg Val Leu Phe Met Asp Gly Asn Cys Tyr
 165 170 175

tac aag aac ccc tgc aca gga gcg gtg aag gtg acc cca ggc gcc ctc 691
 Tyr Lys Asn Pro Cys Thr Gly Ala Val Lys Val Thr Pro Gly Ala Leu
 180 185 190 195

ctg ggc ctg agc aat ctc acc cat ctg tct gtg aag tat aac aac ctc 739
 Leu Gly Leu Ser Asn Leu Thr His Leu Ser Val Lys Tyr Asn Asn Leu
 200 205 210

aca aag gtg ccc cgc caa ctg ccc ccc agc ctg gag tac ctc ctg gtg 787
 Thr Lys Val Pro Arg Gln Leu Pro Pro Ser Leu Glu Tyr Leu Leu Val

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Ser Tyr Asn Leu Ile Val Lys Leu Gly Pro Glu Asp Leu Ala Asn Leu			
230	235	240	
acc tcc ctt cga gla ctt gat gtg ggt ggg aat tgc cgt cgc tgc gac			883
Thr Ser Leu Arg Val Leu Asp Val Gly Gly Asn Cys Arg Arg Cys Asp			
245	250	255	
cat gcc ccc aat ccc tgt ata gaa tgt ggc caa aag tcc ctc cac ctg			931
His Ala Pro Asn Pro Cys Ile Glu Cys Gly Gln Lys Ser Leu His Leu			
260	265	270	275
cac cct gag acc ttc cat cac ctg agc cat ctg gaa ggc ctg gtg ctg			979
His Pro Glu Thr Phe His His Leu Ser His Leu Glu Gly Leu Val Leu			
280	285	290	
aag gac agc tct ctc cat aca ctg aac tct tcc tgg ttc caa ggt ctg			1027
Lys Asp Ser Ser Leu His Thr Leu Asn Ser Ser Trp Phe Gln Gly Leu			
295	300	305	
gtc aac ctc tcg glg ctg gac cta agc gag aac ttt ctc tat gaa agc			1075
Val Asn Leu Ser Val Leu Asp Leu Ser Glu Asn Phe Leu Tyr Glu Ser			
310	315	320	
atc aac cac acc aat gcc ttt cag aac cta acc cgc ctg cgc aag ctc			1123
Ile Asn His Thr Asn Ala Phe Gln Asn Leu Thr Arg Leu Arg Lys Leu			
325	330	335	
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Asn Leu Ser Phe Asn Tyr Arg Lys Lys Val Ser Phe Ala Arg Leu His			
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ctg gca agt tcc ttc aag aac ctg gtg tca ctg cag gag ctg aac atg			1219
Leu Ala Ser Ser Phe Lys Asn Leu Val Ser Leu Gln Glu Leu Asn Met			
360	365	370	
aac ggc atc ttc ttc cgc tcg ctc aac aag tac acg ctc aga tgg ctg			1267
Asn Gly Ile Phe Phe Arg Ser Leu Asn Lys Tyr Thr Leu Arg Trp Leu			
375	380	385	
gcc gat ctg ccc aaa ctc cac act ctg cat ctt caa atg aac ttc atc			1315
Ala Asp Leu Pro Lys Leu His Thr Leu His Leu Gln Met Asn Phe Ile			
390	395	400	

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 Asn Gln Ala Gln Leu Ser Ile Phe Gly Thr Phe Arg Ala Leu Arg Phe
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 Val Asp Leu Ser Asp Asn Arg Ile Ser Gly Pro Ser Thr Leu Ser Glu
 420 425 430 435

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 Ala Thr Pro Glu Glu Ala Asp Asp Ala Glu Gln Glu Glu Leu Leu Ser
 440 445 450

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 Ala Asp Pro His Pro Ala Pro Leu Ser Thr Pro Ala Ser Lys Asn Phe
 455 460 465

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 Met Asp Arg Cys Lys Asn Phe Lys Phe Thr Met Asp Leu Ser Arg Asn
 470 475 480

aac ctg gtg act atc aag cca gag atg ttt gtc aat ctc tca cgc ctc 1603
 Asn Leu Val Thr Ile Lys Pro Glu Met Phe Val Asn Leu Ser Arg Leu
 485 490 495

cag tgt ctt agc ctg agc cac aac tcc att gca cag gct gtc aat ggc 1651
 Gln Cys Leu Ser Leu Ser His Asn Ser Ile Ala Gln Ala Val Asn Gly
 500 505 510 515

tct cag ttc ctg ccg ctg act aat ctg cag gtg ctg gac ctg tcc cat 1699
 Ser Gln Phe Leu Pro Leu Thr Asn Leu Gln Val Leu Asp Leu Ser His
 520 525 530

aac aaa ctg gac ttg tac cac tgg aaa tcg ttc agt gag cta cca cag 1747
 Asn Lys Leu Asp Leu Tyr His Trp Lys Ser Phe Ser Glu Leu Pro Gln
 535 540 545

ttg cag gcc ctg gac ctg agc tac aac agc cag ccc ttt agc atg aag 1795
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 550 555 560

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 Gly Ile Gly His Asn Phe Ser Phe Val Ala His Leu Ser Met Leu His
 565 570 575

agc ctt agc ctg gca cac aat gac att cat acc cgt gtg tcc tca cat 1891
 Ser Leu Ser Leu Ala His Asn Asp Ile His Thr Arg Val Ser Ser His

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Val Asp Leu Leu Leu Glu Val Gln Thr Lys Val Pro Gly Leu Ala Asn
775 780 785

ggt gtg aag tgt ggc agc ccc ggc cag ctg cag ggc cgt agc atc ttc 2515
Gly Val Lys Cys Gly Ser Pro Gly Gln Leu Gln Gly Arg Ser Ile Phe
790 795 800

gca cag gac ctg cgg ctg tgc ctg gat gag gtc ctc tct tgg gac tgc 2563
Ala Gln Asp Leu Arg Leu Cys Leu Asp Glu Val Leu Ser Trp Asp Cys
805 810 815

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Phe Gly Leu Ser Leu Leu Ala Val Ala Val Gly Met Val Val Pro Ile
820 825 830 835

ctg cac cat ctc tgc ggc tgg gac gtc tgg tac tgt ttt cat ctg tgc 2659
Leu His His Leu Cys Gly Trp Asp Val Trp Tyr Cys Phe His Leu Cys
840 845 850

ctg gca tgg cta cct ttg ctg gcc cgc agc cga cgc agc gcc caa gct 2707
Leu Ala Trp Leu Pro Leu Leu Ala Arg Ser Arg Arg Ser Ala Gln Ala
855 860 865

ctc ccc tat gat gcc ttc gtg gtg ttc gat aag gca cag agc gca gtt 2755
Leu Pro Tyr Asp Ala Phe Val Val Phe Asp Lys Ala Gln Ser Ala Val
870 875 880

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Gly Arg Arg Ala Leu Arg Leu Cys Leu Glu Asp Arg Asp Trp Leu Pro
900 905 910 915

ggc cag acg ctc ttc gag aac ctc tgg gct tcc atc tat ggg agc cgc 2899
Gly Gln Thr Leu Phe Glu Asn Leu Trp Ala Ser Ile Tyr Gly Ser Arg
920 925 930

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935 940 945

cgc acc agc ttc ctg ctg gct cag cag cgc ctg ttg gaa gac cgc aag 2995
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65		70		75		80
Ser	Asp	Phe	Val	His	Leu	Trp
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Asn	Cys	Pro	Pro	Thr	Gly	Met
		100		105		110
Thr	Ile	Glu	Pro	Arg	Thr	Leu
		115		120		125
Asn	Leu	Ser	Tyr	Asn	Gly	Ser
		130		135		140
Leu	Val	Asn	Leu	Ser	Leu	Ala
145			150		155	160
Asn	Ser	Leu	Ala	Gly	Leu	Tyr
			165		170	175
Asn	Cys	Tyr	Tyr	Lys	Asn	Pro
		180		185		190
Gly	Ala	Leu	Leu	Gly	Leu	Ser
		195		200		205
Asn	Asn	Leu	Thr	Lys	Val	Pro
		210		215		220
Leu	Leu	Val	Ser	Tyr	Asn	Leu
225			230		235	240
Ala	Asn	Leu	Thr	Ser	Leu	Arg
			245		250	255
Arg	Cys	Asp	His	Ala	Pro	Asn
		260		265		270
Leu	His	Leu	His	Pro	Glu	Thr
		275		280		285
Leu	Val	Leu	Lys	Asp	Ser	Ser
		290		295		300
Gln	Gly	Leu	Val	Asn	Leu	Ser
305			310		315	320
Tyr	Glu	Ser	Ile	Asn	His	Thr
			325		330	335
Arg	Lys	Leu	Asn	Leu	Ser	Phe
		340		345		350
Arg	Leu	His	Leu	Ala	Ser	Ser
		355		360		365
Leu	Asn	Met	Asn	Gly	Ile	Phe
		370		375		380
Arg	Trp	Leu	Ala	Asp	Leu	Pro
385			390		395	400
Asn	Phe	Ile	Asn	Gln	Ala	Gln
			405		410	415
Leu	Arg	Phe	Val	Asp	Leu	Ser
		420		425		430
Leu	Ser	Glu	Ala	Thr	Pro	Glu

435 440 445
 Leu Leu Ser Ala Asp Pro His Pro Ala Pro Leu Ser Thr Pro Ala Ser
 450 455 460
 Lys Asn Phe Met Asp Arg Cys Lys Asn Phe Lys Phe Thr Met Asp Leu
 465 470 475 480
 Ser Arg Asn Asn Leu Val Thr Ile Lys Pro Glu Met Phe Val Asn Leu
 485 490 495
 Ser Arg Leu Gln Cys Leu Ser Leu Ser His Asn Ser Ile Ala Gln Ala
 500 505 510
 Val Asn Gly Ser Gln Phe Leu Pro Leu Thr Asn Leu Gln Val Leu Asp
 515 520 525
 Leu Ser His Asn Lys Leu Asp Leu Tyr His Trp Lys Ser Phe Ser Glu
 530 535 540
 Leu Pro Gln Leu Gln Ala Leu Asp Leu Ser Tyr Asn Ser Gln Pro Phe
 545 550 555 560
 Ser Met Lys Gly Ile Gly His Asn Phe Ser Phe Val Ala His Leu Ser
 565 570 575
 Met Leu His Ser Leu Ser Leu Ala His Asn Asp Ile His Thr Arg Val
 580 585 590
 Ser Ser His Leu Asn Ser Asn Ser Val Arg Phe Leu Asp Phe Ser Gly
 595 600 605
 Asn Gly Met Gly Arg Met Trp Asp Glu Gly Gly Leu Tyr Leu His Phe
 610 615 620
 Phe Gln Gly Leu Ser Gly Leu Leu Lys Leu Asp Leu Ser Gln Asn Asn
 625 630 635 640
 Leu His Ile Leu Arg Pro Gln Asn Leu Asp Asn Leu Pro Lys Ser Leu
 645 650 655
 Lys Leu Leu Ser Leu Arg Asp Asn Tyr Leu Ser Phe Phe Asn Trp Thr
 660 665 670
 Ser Leu Ser Phe Leu Pro Asn Leu Glu Val Leu Asp Leu Ala Gly Asn
 675 680 685
 Gln Leu Lys Ala Leu Thr Asn Gly Thr Leu Pro Asn Gly Thr Leu Leu
 690 695 700
 Gln Lys Leu Asp Val Ser Ser Asn Ser Ile Val Ser Val Val Pro Ala
 705 710 715 720
 Phe Phe Ala Leu Ala Val Glu Leu Lys Glu Val Asn Leu Ser His Asn
 725 730 735
 Ile Leu Lys Thr Val Asp Arg Ser Trp Phe Gly Pro Ile Val Met Asn
 740 745 750
 Leu Thr Val Leu Asp Val Arg Ser Asn Pro Leu His Cys Ala Cys Gly
 755 760 765
 Ala Ala Phe Val Asp Leu Leu Leu Glu Val Gln Thr Lys Val Pro Gly
 770 775 780
 Leu Ala Asn Gly Val Lys Cys Gly Ser Pro Gly Gln Leu Gln Gly Arg
 785 790 795 800
 Ser Ile Phe Ala Gln Asp Leu Arg Leu Cys Leu Asp Glu Val Leu Ser

